



AGRICULTURAL MARKETING

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Administrator Roy W. Lennartson

"SERVICE," SAYS Roy W. Lennartson, the newly appointed Administrator of the Consumer and Marketing Service of the U.S. Department of Agriculture, "is the most important work of this organization. That's what our people are skilled in. And that's where all of us find our greatest satisfactions and our richest rewards."

These words are from a man who well knows what he is talking about, for he is an old friend and colleague whom we are very proud to welcome back. Mr. Lennartson was with us from our infancy in February 1965, when C&MS was formed, until a year and a half ago when he transferred to USDA's Foreign Agricultural Service as its Associate Administrator.

Mr. Lennartson is well-qualified for his new post, for in most of his 32 years with USDA, he has diligently served with increasingly responsible assignments in the areas that he now will direct.

He joined USDA in 1936 as an agricultural economist with the Farm Credit Administration. After serving in the Army in World War II, he returned to USDA as Assist-

ant Director of the Poultry Branch in what was then the Production and Marketing Administration. In 1951, he was promoted to Assistant Administrator for Marketing in that



agency, and in 1953, became the Deputy Administrator of the newly organized Agricultural Marketing Service. He later became Associate Administrator of the Agency.

Throughout his service, Mr. Lennartson has had extensive and detailed experience with all of the activities administered by C&MS. These include such food programs

as food stamps and commodity distribution for the needy, and school lunch and child nutrition programs for the young. They also include consumer protection functions under the Wholesome Meat Act and Wholesome Poultry Products Act, and a wide variety of marketing service and regulatory programs.

Mr. Lennartson's direction of these programs has given him much contact with people who are concerned with these activities, and he enjoys a wide acquaintance with persons interested in all phases of the marketing of food and other farm products. As a result, he sees C&MS' task quite clearly. He says there is no more challenging problem today than seeing that the abundance our farms can produce is well distributed, so that all Americans can enjoy their share of that abundance.

The area in which C&MS works, the marketing of food and farm products, is "demanding work," he says. "And we have a fine staff of competent, dedicated people at work performing these services. I'm proud to be back here, heading up this important work."

COVER STORY

Convenience food shoppers are assured of wholesome and properly labeled food when the Federal meat inspection shield is found on prepared foods. See page 7.



CLIFFORD M. HARDIN
Secretary of Agriculture

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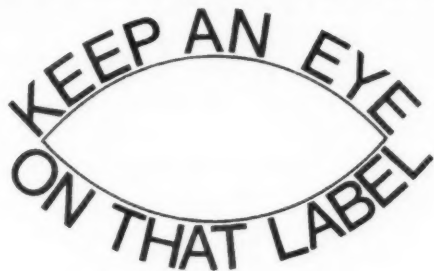
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Reference to commercial products and services does not imply endorsement or discrimination by the Department of Agriculture.

on meat and poultry products



By Dr. W. J. Minor

EVERY LABEL OF A federally inspected meat or poultry product is actually a servant eagerly waiting to help smart shoppers. And you may have noticed that smart shoppers are those who pause to examine closely even the small print on the package of food they buy.

No matter the flashy colors or bold printing, if the product contains meat or poultry, the label must tell the whole truth.

Most important, of course, is the product name on the label. Few consumers, for example, know the exact composition of various sausage products. But by understanding a few basic labeling requirements of the U.S. Department of Agriculture's Consumer Protection Program, consumers can get a better idea of what they're buying.

For example, if a frankfurter is labeled "all beef," it must contain no meat other than beef. But if the frankfurter is labeled "all meat" it may contain various meats such as beef, pork, or mutton. Frankfurters which contain certain extenders, such as cereals, can't be called "all meat" or "all beef" and the label must explain, for example, "frankfurters, cereal added."

And a product labeled "Beef and Gravy" must contain more beef than gravy. But if a shopper wants more gravy than beef—possibly to use in sauces or casseroles—then "Gravy and Beef" is the right product.

These other hints will also be helpful. "Chili con carne" must contain 40 percent meat although "chili con carne with beans" must contain a minimum of 25 percent meat. To be justifiably called a meat stew or

a meat or poultry pie, the product must contain at least 25 percent meat. The percentages are based on the weight of the fresh meat used in the processing.

Consumers can also benefit from descriptive terms used with hams. The simple term "ham" can be used only if the meat is returned to its original "green weight" after being treated in a curing solution. The term "ham—water added" applies to a product which has acquired not more than 10 percent added weight from curing solutions. When the product has acquired more than 10 percent added weight during curing, it must be labeled "imitation ham." The qualifying terms must be prominent on the label.

A recent trend in processing is to supplement the meat or poultry by blending it with a soybean product. If this is the case, the package must clearly indicate the particular product added.

This same theory applies to another part of the label, the ingredients statement, where the ingredients must be listed in descending order of weight in the product. Laboratory technicians with USDA's Consumer and Marketing Service run periodic checks on meat and poultry products to be certain that they contain no more or less than stated on the label.

Consumers could be deceived by the pictorial representation on a package. Often the manufacturer pictures the product as it would look after preparation or with extra trimmings not included in the package. If this is done, the picture must be marked "serving suggestion" or "sug-

gested serving." In addition, the quantity of the product pictured must agree with the contents.

The weight of the contents must also appear on the label. This provides the consumer with a means of comparing prices. Smart shoppers can also get help from the name and address of the manufacturer or packer. Labels are not permitted to indicate, for example, that the food was produced on a farm or in the country unless the food was prepared there and in a recognized farm or country manner. In all other cases the words "brand" or "style" must appear after the other descriptive words.

Consumers should not forget the importance of the round USDA inspection mark which must appear on all products made by firms which sell across State lines or to foreign countries. This mark not only means that the product has been thoroughly inspected for wholesomeness, but also that the label has been reviewed by C&MS specialists. These experts reviewed over 100,000 labels last year and rejected 2,000 for failure to accurately state the contents of the package.

So by spending a few extra moments at the food store checking that label, consumers can get a more accurate picture of what they're buying and whether what they're buying is their money's worth. □

The author is Chief, Labels, Standards, and Packaging Branch, Technical Services Division, C&MS, USDA.

How to Buy Beef For Your Freezer

By Sandra S. Brookover

CONSUMERS OFTEN ASK, "Can I save money by buying a side of beef for my freezer?"

This is a question to which there is no clear-cut "yes" or "no" answer.

To get an answer, you have to do some figuring. And you have to know: how much meat you will get from a side, the quality of the meat, charges for processing and freezing, and costs of comparable retail cuts.

The first thing to know, if you're considering buying a side of beef, is that weights quoted are usually "hanging" weights—that is, the weight before cutting, trimming, and boning. The cutting loss—the excess bone and fat that's thrown away—can vary from 20 to 30 percent, or even more. For example, if you buy a 300-pound side of beef and the cutting loss is 25 percent (which is not unusual), then you would end up with only 225 pounds of usable meat cuts.

Another consideration is that when you buy a side of beef you get a mixture of cuts, both high and low-cost, including some you might not usually buy at retail such as short ribs, stewing beef, and brisket. If you cannot, or will not, use all these cuts, then you would lose some of the price advantage you could gain by buying in bulk.

A rule of thumb for yield of carcass beef is: 25 percent steaks, 25 percent roasts, 25 percent ground beef and stew meat, and so on, and 25 percent waste. A considerable part of the yield of roasts, however, will be chuck roasts.

To put it in other words, out of

a typical 300-pound side, you would get 72 pounds of roasts, of which 44 pounds would be chuck roasts, 18 pounds rib roasts, and nearly 10 pounds rump roasts. You would also get about 73 pounds of ground beef and stew meat, and about 73 pounds of steaks, of which 33 pounds would be round steaks and 40 pounds would be loin steaks.

You should consider carefully whether you will be able to make use of these quantities within the recommended maximum freezer storage time (8 to 12 months for roasts and steaks, 3 to 4 months for ground beef). If not, money-saving advantages would be nullified, since longer storage would tend to make the meat dry and less flavorful.

Quality is another important consideration. Your only sure guide to quality is the U.S. Department of Agriculture grade shield. You can depend upon USDA Prime or USDA Choice beef to be of the same quality no matter where or when you buy it. Steaks and roasts from rib and loin, in these grades, will be consistently tender, juicy, and flavorful. Most people would not want to freeze large quantities of low-quality beef cuts because they do not offer as much eating satisfaction and therefore may not justify the expense of freezing them and holding them in the freezer.

USDA grades for beef are based

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on nationally uniform Federal standards of quality and are applied by highly trained and closely supervised Federal graders, employees of USDA's Consumer and Marketing Service.

For an explanation of the grades and what they mean in relation to the various cuts, see "How to Buy Beef Steaks" (G-145) and "How to Buy Beef Roasts" (G-146), both available on postcard request to the Office of Information, U.S. Department of Agriculture, Washington, D.C. 20250.

USDA also has grades for yield of usable meat from a beef carcass. The yield grades, which are numerical and range from Yield Grade 1 to Yield Grade 5, literally measure the yield of boneless, closely trimmed retail cuts from the high-value parts of the carcass, the round, loin, rib, and chuck. However, they also reflect differences in total yield of retail cuts. For example, a Yield Grade 1 carcass will yield 79.8 percent or more in retail cuts, while a Yield Grade 5 carcass will yield 65.9 percent or less. Obviously, you can afford to pay more for a higher yielding carcass.

For more information on yield grades, see "USDA Yield Grades for Beef" (MB-45), available from the address above.

Finally, before buying carcass beef, make sure you are dealing with an establishment with a reputation for honesty and fairness. If you're not sure, check with your local Better Business Bureau or Chamber of Commerce. Although most meat

Should you buy a side of beef or retail cuts on special? C&MS provides some pointers on answering this question.

dealers are honest, there are always a few who will take advantage of the consumer who is buying a product with which he is unfamiliar—and most consumers are unfamiliar with beef in carcass form.

As an alternative to buying a side or quarter of beef, you might want

to consider buying wholesale cuts, such as a rib (which will give you just rib roasts, steaks, and some lean trim) or a short loin (from which you'll get porterhouse, T-bone, and club steaks). Or you might consider simply buying the retail cuts you like most when your local store has

them on sale. Many consumers have found this the most practical method of all—and sometimes the best method of saving money, too.

A new booklet, "How to Buy Meat for Your Freezer" (G-166) will be available about May 1 from the address mentioned previously. ☐

HOW TO FIGURE RETAIL VALUE OF BEEF PURCHASED IN CARCASS FORM (AND MAKE COMPARISONS)

Note: To make realistic comparisons it is necessary to know both the quality grade and the yield grade of the carcass. The higher the quality grade the more a carcass is worth; likewise, the higher the yield grade, the more it is worth—and the more lean meat the carcass will yield. For illustration, this chart shows the yield from 300-pound USDA Choice grade, Yield Grade 3, beef side, which is fairly typical.

EXAMPLE: You buy a 300 lb. beef side (USDA Choice, Yield Grade 3) for 65¢ a pound, hanging weight (and the price includes cutting, wrapping, and quick-freezing).

Cost of carcass purchase: Carcass weight X quoted price = dollars required to buy side. (300 lbs. X 65¢ = \$195). **But** total usable beef (see below) is only 72.8% of carcass (hanging) weight. So, 72.8 X 300 lbs. = 218.40 lbs. (usable beef). Therefore, your actual cost per pound for usable beef is \$195 ÷ 218.40 lbs. = 89.3¢ per pound.

Cost of retail purchase: To figure an overall retail price per pound for beef, which will be comparable with the cost per pound of carcass beef, obtain local prices per pound for the retail cuts listed (be sure they are same quality grade as carcass—in this example USDA Choice) then multiply each price times the number of pounds you would get in a side of beef. Next total the Retail Value column. This would be your total cost, at retail, for the equivalent of a 300 lb. side of beef. To get the cost per pound, divide this total by the number of pounds of usable beef you would get in your carcass purchase (in this example, 218.40 pounds). Then you will have a retail price-per-pound to compare with the carcass price-per-pound (89.3¢ in this example).

Yield of Retail Cuts	Percent of Carcass (Yield Grade 3)	Pounds		Local Prices per lb.	=	Retail Value
Round Steak	11.0	33.0	X	_____	=	_____
Rump Roast (boneless)	3.3	9.9	X	_____	=	_____
Porterhouse, T-bone, Club Steaks	5.1	15.3	X	_____	=	_____
Sirloin Steak	8.3	24.9	X	_____	=	_____
Rib Roast	6.1	18.3	X	_____	=	_____
Chuck Blade Roast	8.9	26.7	X	_____	=	_____
Chuck Arm Roast	5.8	17.4	X	_____	=	_____
Hamburger	11.1	33.3	X	_____	=	_____
Stew Meat	10.3	30.9	X	_____	=	_____
Brisket	2.1	6.3	X	_____	=	_____
Flank Steak5	1.5	X	_____	=	_____
Kidney3	.9	X	_____	=	_____
Total Usable Retail Cuts ...	72.8	218.4				
Waste (fat, bone, shrinkage) ..	27.2	81.6				
TOTAL	100.0	300.0		TOTAL RETAIL VALUE		_____

What Do BIOLOGICAL RESIDUES Mean to You?

C&MS helps protect you from the possible hazards of chemical substances which remain in animal and poultry tissues.

AS DEFINED BY THE U.S. Department of Agriculture, biological residues are substances which remain in animal and poultry tissues after exposure to agricultural chemicals: antibiotics, hormone-like agents and growth promoters, insecticides, fungicides, herbicides, or tranquilizers.

To protect you against hazards associated with biological residues in food animals and birds, USDA's Consumer and Marketing Service operates a continuous biological residue surveillance as part of its Federal meat and poultry inspection programs.

C&MS is charged with insuring the wholesomeness of meat and poultry moving in interstate commerce, as provided by the Federal Meat Inspection Act and Poultry Products Inspection Act. Further protection against residues is provided by the Federal Food, Drug, and Cosmetics Act and the Federal Insecticide, Fungicide, and Rodenticide Act.

Studies for the detection and evaluation of chlorinated hydrocarbon insecticides (DDT and the like) were started in 1947. Since then, testing for residues has been greatly expanded. Detection of chemical, drug, or pesticide residues in meat and poultry is done by using the latest laboratory techniques.

Prevention and detection of residues in meat and poultry is accomplished in a two-fold manner.

The residue program's two main parts are the objective and the selective phases.

The objective phase of residue surveillance is designed to randomly select animal and poultry tissues from kill floors of slaughtering plants throughout the United States. These selected tissues are tested for chemical, drug, hormone, and pesticide residues. The number of samples collected is based on the number of animals and birds slaughtered. When sampling is done this way, C&MS can get a picture of residue levels in food animals and birds throughout the country. It gives C&MS a basis for better control and identification of problem areas. The objective phase can detect a rise in residue levels in a particular area.

If residues are above the permitted levels, the selective phase is initiated. Increased efforts are concentrated in the problem area. The suspect animal or bird's origin is pinpointed, and more tests are run to isolate the offending chemical, drug, hormone, or pesticide.

Tolerances for residues of various types of chemicals, drugs, and pesticides have been established by the Food and Drug Administration of the Department of Health, Education and Welfare. Many materials have tolerances of zero. For example, the FDA has set tolerances at zero for chlorinated hydrocarbon insecticides

such as dieldrin, feed additive antibiotics such as penicillin and feed additive hormones, such as diethyl stilbestrol.

Since it has been demonstrated that animals with residues in their tissues will gradually eliminate the residue if no further contamination occurs, withdrawal periods before slaughter have been established. Withdrawal periods vary with each class or type of chemical. For instance, beef cattle treated with a feed additive hormone must not be fed the drug two days before slaughter. Failure to observe withdrawal periods will result in unwholesome meat. Such meat is condemned.

When a particular biological residue is found to be above the permitted level, C&MS notifies the FDA or the Agricultural Research Service, USDA. These agencies conduct a field review of the area where the suspected animal or bird originated.

In many cases the field review will call for advising the producer against improper use of chemicals, drugs, or pesticides. By understanding the reasons for the tolerances, and the withdrawal periods prescribed, producers can avoid having their products retained or condemned. Biological residue surveillance has an important role in C&MS's responsibility for assuring consumers of a wholesome, clean and unadulterated meat supply. □

MEAT AND POULTRY INSPECTION: A Convenience For Convenience-Food Shoppers

By Dr. John C. deHoll

AS MORE PEOPLE began having less time to prepare meals, and soups and sandwiches, chips and dips became as much a part of the American diet as ham and eggs, more and more products—from complete meals to imaginative snacks—began being processed for the consumer in large commercial plants.

When processed meat and poultry products started coming out of such plants, inspectors with the meat and poultry inspection program of the U.S. Department of Agriculture went into them to make sure that the products were as wholesome and as properly prepared as the ones you would make in your own kitchen.

The meat and poultry inspector's job is a big one. In fiscal year 1968 USDA's Consumer and Marketing Service inspected about forty billion pounds of processed meat products and more than two and a half billion pounds of processed poultry products. His job is also an exacting one, and his duties are many.

The inspector checks the processing plant and its equipment to make sure that they are as clean as the things you would use yourself. C&MS approved the layout and the facilities in the plant to determine that they could be kept clean before inspection was granted to the plant.

The inspector then examines the raw meat or poultry that will be used to make the product. It has been federally inspected, of course, but—since these are perishable items—he double checks to make sure that the products are still fresh and wholesome.

He also checks all the ingredients besides the meat and poultry, from

the spices in products to the vegetables in frozen dinners or pot pies. Just as carefully as you gather the ingredients needed for the recipes you prepare at home, the inspector makes sure that the products are wholesome, truly what they are labeled to be, and the right ingredients for the product being made.

The inspector has a copy of the formula or recipe the plant uses, and he observes the measuring of the ingredients to make sure that the amounts comply with the formula as accurately as the measurements in your own kitchen would. All the cutting, chopping, mixing—or stuffing, slicing, forming—also must be checked by the inspector.

If the product is cooked, like sausage, the inspector checks the cooking time and the temperature to make sure the product is cooked long enough and well enough to be wholesome. He also checks the smoking and the curing of products such as ham or bacon. Products labeled frozen, like turkey dinners, must be hard-frozen, with the time and temperature necessary to make and keep them that way varying from product to product.

The inspector examines the product's packaging material to make

sure that it is sound. It must be made of a safe material, previously approved by C&MS. A can for a product like corned beef hash must be properly closed and sealed, and a package for a product like chicken salad mix must provide adequate protection for the product.

Samples from each lot of canned products are incubated, or held for a specific length of time at a high temperature, to make sure that they will remain sound. If they do not, the processors must be able to recall the entire lot from which the samples were taken.

The inspector then compares the product with its label, which must be approved by C&MS before it can be used. The name and the list of ingredients—with the item weighing the most first, on down to the item weighing the least—must be exactly right so that you know what you are buying. The net weight on the label must be accurate. The inspector weighs samples from each lot and checks them, and checks the scales to make sure that they are right. You must get what you pay for and must be able to depend on that measurement if you use a product like meat sauce as an ingredient in a recipe of your own.

An inspector may refuse to allow shipping of the product if it has not been handled properly anywhere along the line.

Processed meat and poultry are a convenience that frees your time and your imagination. And the inspector makes it convenient for you to buy these products, confident that they have been checked through all steps of processing and labeling. □

The author is Acting Chief, Operations Branch, Processed Food Inspection Division, C&MS, USDA.



a school lunch for all seasons

NOT JUST ANYONE can have lunch at the new Cafe of the Three Seasons in Springfield, Va., even though a completely nutritious lunch costs only 35 cents.

The little cosmopolitan cafe is a very exclusive place where table etiquette and seasonal decor get unusual emphasis. But, sorry, only the 960 students at Springfield Estates Elementary School can get "reservations" at this little noon spot.

There really isn't anything different about Springfield Estates school lunch program from those of most other schools in the country except the bit of imagination used to liven up the cafeteria and to make it a training ground for better table manners. As Mrs. Kate Flaherty, assistant principal, said, they wanted to make the cafeteria "a more pleasant place to be" and to go beyond "just talking about

manners by doing something about them."

Like other schools participating in the National School Lunch Program, Springfield Estates provides nutritional meals at a low price and tries to make lunch time an educational process for the children, but the approach Springfield Estates took might be the big difference. The National School Lunch Program is administered by the Consumer and Marketing Service of the U.S. Department of Agriculture.

School activities at Springfield Estates are developed by the Student Cooperative Association "within the framework of where children can legislate," Mrs. Flaherty said. The association is composed of several student committees with teachers as sponsors for different areas of school life. The cafeteria committee wanted to improve cafeteria manners and behavior and to increase interest and

participation in the school lunch program.

So, it was decided to construct a restaurant atmosphere in one area of the cafeteria decorated with murals of the four seasons, even though the simulated cafe is named for the three seasons that school is in session. Other features are a white-picket fence, round tables with checkered table cloths, multi-colored round-back chairs, and artificial trees. For variety, the table decorations and trees can be changed to match each season.

To a large extent, the project was designed to create an incentive among all students. As a reward, those boys and girls who display commendable table etiquette and cafeteria behavior are selected to take their lunch into the Cafe of the Three Seasons.

After drawing up the preliminary plans for the cafe, the cafeteria com-

mittee enlisted volunteer assistance of groups both within and outside the school to help build and assemble the little cafe—making the whole project a community effort.

Art students at neighboring Lee High School came by Springfield Estates in the morning before their own classes to paint the large murals that provide the backdrop for the restaurant. Under the direction of art teacher Hunter Benedict, the high school students took four original drawings by elementary students and reproduced them on the larger panels.

Also on "retainer" was PTA president Robert Ardrey, who borrowed the round tables from the local swimming pool grounds. Mrs. Mary Lou Boucher, cafeteria hostess who helps supervise the students during the lunch periods, rounded up the awning that now hangs over the murals. And Mrs. Louise Sisk, cafeteria manager, and Arthur Meadows, chief custodian, chipped in much of the work to help shape up the project.

But in the end, most of the planning and finishing touches were handled by Springfield Estates students. In fact, Mrs. Flaherty says the project was particularly instrumental in bringing out the talents of two students who previously were shy and unresponsive to participating in school activities. The behavior and attitude of one rather quiet boy improved greatly after he began working on the cafe, she said.

Once the cafe was finished in early January, the cafeteria committee set the procedure for choosing students who could dine in the cafe each day. Each classroom student chairman and teacher works with the cafeteria hostess to select students, usually two from each room, to eat lunch in the cafe.

And with seven classes in the cafeteria every thirty minutes, the 13-chair cafe seems always filled with

well-mannered children. But the competition among the students is keen, and from talking to the students, it appears most of them have already dined in the cafe and are concentrating on their manners so they can make a return visit.

Mrs. Flaherty reports that the students are very enthusiastic about the cafe and that parents and area school officials, as well as several interested people, have dropped in to see their Cafe of the Three Seasons, and they go away delighted with the idea. "It's the type of project any school could start," Mrs. Flaherty said. "It involves the students in the real life of the school, and they have a feeling of belonging to the school through working for it."

The Cafe of the Three Seasons has certainly brought a new dimension to the Springfield Estates school lunch program. And Mrs. Flaherty has even seen signs of increased participation in the school lunch program.

Lunching at the Three Seasons still means getting a well-balanced, hearty meal for only 35 cents, including a protein-rich food, vegetables or fruits, bread, butter or margarine, and milk . . . and often a dessert, too.

Actually, this little sidewalk cafe decor looks a great deal like any of its real counterparts. Little people have a wholesome lunch in decorative surroundings and, of course, have a good time.

But you might notice one difference in the Cafe of the Three Seasons, if you compare it to a typical restaurant setting. The boys at Springfield Estates still prefer sitting at separate tables from the girls—and vice versa. As a 7-year-old youngster named Tommy explained, "We don't want to get smothered by all those ol' girls. They giggle and talk too much, and we've got important things to talk about." □



a balancer for the raisin industry

The Federal Raisin Marketing Agreement and Order balances raisin supply with demand.

By Martin G. Young

CALIFORNIA RAISIN production was near record high for three of the past four years. Foreign competition in export markets was tough. Yet, at the beginning of the 1968-69 marketing season, raisin supply was in balance with demand.

How can the raisin industry keep itself on an even keel?

A strapping twenty-year old youngster is proving to be the answer.

In 1949 the growers and handlers of the California raisin industry, and the U.S. Department of Agriculture, through their collective efforts, gave birth to the Federal Raisin Marketing Agreement and Order.

Like any growing youngster, the raisin marketing agreement and order has had some changes. The latest changes occurred in 1967 when 92 percent of the producers and more than 50 percent of the handlers approved the amended program now in effect. The program is administered under the guidance of the Fruit and Vegetable Division of USDA's Consumer and Marketing Service. The Raisin Administrative Committee, comprised of producers and handlers, manages the program locally.

California raisin production exceeds domestic demand during an average year, and can far outstrip American consumption in a really good year. This off-spring of the industry—the marketing agreement and order—regulates the amount and quality of raisins for domestic markets. The balance of the crop is placed in reserve for export.

The marketing order takes effect as soon as a producer delivers his raisins to a packer. The raisins are inspected and certified as to quality. The packer then takes a certain percentage of the standard quality raisins as "free tonnage," that is, the estimated quantity needed for domestic use, plus other Western Hemisphere markets, except Mexico.

The remainder of the crop is

placed in a "pool" as "reserve tonnage."

The percentage of the producers' deliveries held in reserve is sold for export. The price for reserve tonnage is currently about one-third less than the price for domestic raisins. Each producer receives the same net return per ton from the sale of the lower-priced reserve tonnage.

The percentage of the raisins allocated for the free tonnage market is the same for all producers in any given year. Since the free tonnage percentage is also the same for all packers, each producer receives his share in the amount of raisins sold domestically at better prices.

Under this method the farmers sell part of their crop at a higher rate, and part at a lower rate, but none of it goes to waste.

The percentages that are fixed to allocate free tonnage and reserve tonnage vary from year to year according to crop size and domestic demands. The system is flexible enough to handle corrections in estimates of raisin demand and production within a crop year. This insures that American consumers will have plentiful supplies of raisins and that the raisin producers will realize a better total return on their products.

In selling reserve tonnage for export, the Committee determines the quantity likely to be needed for export over a specific period and the price at which it can be sold in competition with raisins from other countries. Then the Committee offers the determined quantity to packers at a price which will permit the packers to sell packaged raisins competitively in export.

As the packer receives orders from foreign buyers, the Committee releases reserve tonnage to him. In this way, the regular packers and exporters do the actual selling in the export trade.

How well does this strapping

youngster from California work?

California's raisin production for 1965, 1966, and 1968 ranged well above average, almost to record highs. The Committee was active in selling 1965 pool tonnage for export, but still had a large excess at the end of the 1965-66 season. There was an even larger quantity of 1966 reserve pool raisins on hand at the end of 1966-67—enough to supply the export market for nine months.

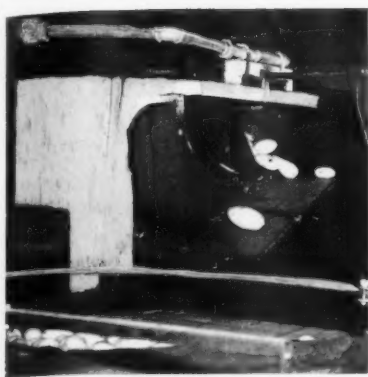
In 1967, raisin production was down. After providing for the domestic and other Western Hemisphere markets, the reserve tonnage was only enough to supply the export requirements for three months. Selling the remaining 1966 reserve, and then the 1967 reserve, the Committee kept exports flowing smoothly into the latter part of 1968 and until reserve tonnage from the 1968 production was fully available.

At the beginning of the 1968-69 marketing season, supply was in balance against demand for the first time since 1964. The domestic markets had been amply supplied. The export markets had received a steady supply of California raisins at competitive prices.

The value of exports from the 1965, 1966, and 1967 reserve pools averaged about \$12,225,000 per year, a sizeable credit to our foreign exchange balance. The 1968 production now promises to be fully ample for all markets during 1968-69.

The marketing agreement and order program seems made to order for the raisin industry. The pooling for export, together with strict control of quality, provides a supporting framework in which the California raisin industry can operate most effectively. □

The author is a Marketing Specialist, Fruit and Vegetable Division, C&MS, USDA.



With skins removed, the potatoes are rinsed and moved onto the inspection table.

A "bruise" count of potatoes by Federal-State inspectors helps processors operate their plants efficiently.

By Donald S. Matheson

Keeping the Gray Out of Instant Mashed and Frozen Potatoes

CHECKING THE QUALITY of potatoes, other vegetables, and fruits, before they are canned, frozen, or dehydrated, is a service Federal-State inspectors have provided growers and processors for many years. Grower-processor contracts often require inspection of the grower's product according to U.S. grade standards, to establish the value of the product and the price the processor pays the grower.

Now potato inspectors in Idaho, Oregon, and Michigan are doing a little something extra—they not only inspect potatoes before they go into the processing line but they also check the potatoes for bruises that show up after peeling. This inspection further establishes the value of the grower's product, because contracts between the grower and processor specify higher payments depending on the percentage of "bruise-free" potatoes in a lot. And, conversely, the price goes down as the percentage of bruised potatoes increases.

Bruises on potatoes—black or gray discolorations—can make instant mashed potatoes gray instead of white and cause unattractive dark spots on frozen french fries. And while most of the work in processing dehydrated or frozen potato products is done by automated equipment, trimming bruises from potatoes is a

hand operation. So bruise-free potatoes are important to the processor for several reasons:

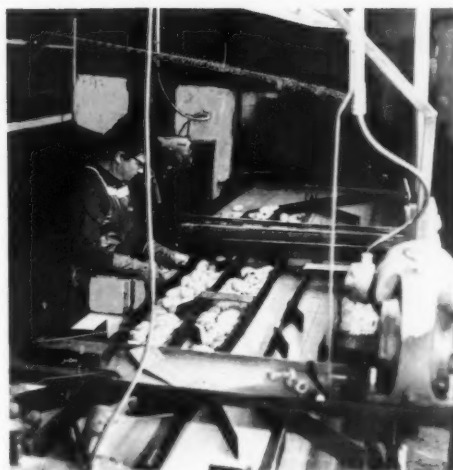
(1) He can process more potatoes—keep his production rate high—if trimming of bruised potatoes doesn't slow down the line.

(2) The fewer bruises that have to be removed from potatoes, the more product he has.

The Federal-State Inspection Service began "bruise-free" potato inspection during the 1968 season, at the request of processors in Idaho, Oregon, and Michigan. The Federal-State Inspection Service is administered by the U.S. Department of Agriculture's Consumer and Marketing Service in cooperation with State agencies. The C&MS Fruit and Vegetable Division trains and supervises the inspectors. Like inspection of potatoes for grade, the bruise-free inspection is paid for by the processor.

Samples of potatoes from each grower's lot are taken for grade inspection and held for at least 48 hours after the potatoes are delivered to the processor by the grower. This allows time for bruises to show up.

The samples of the potatoes are treated with caustic solution to remove their skins, in a small machine similar to the larger ones used on the processing line. Then the inspectors separate the bruise-free and bruised potatoes. A bruise has to be large



A Federal-State inspector examines and separates the potatoes into bruise-free and bruised categories.

enough and dark enough to see to be counted—more than $\frac{1}{8}$ inch in diameter if it's a dark bruise and $\frac{3}{16}$ inch if it's light colored. In some plants an electric eye is used to count potatoes in the bruise-free and bruised categories. Then the inspector computes the percentage of bruise-free potatoes in each lot.

With this information, the processing plant manager can determine how fast or slow his production rate will be, and adjust the processing line accordingly.

The premium payments for bruise-free potatoes are an incentive to growers to handle potatoes carefully during harvest by mechanized diggers, loading into trucks for delivery to storage or to the processor, and unloading at the plant.

The Idaho Potato and Onion Commission also is active in the effort to keep potatoes bruise-free, with a special anti-bruising campaign. Billboards, bumper stickers, radio and television spots, and wall posters are used to encourage growers, field workers, packing plants and everyone involved in handling potatoes for processing or fresh market to treat potatoes gently. □

The author is Chief, Fresh Products Standardization and Inspection Branch, Fruit and Vegetable Division, C&MS, USDA.

CONSUMER AND MARKETING BRIEFS

Selected short items on C&MS activities in consumer protection, marketing services, market regulation, and consumer food programs.

STATE LABORATORIES GEAR UP FOR MEAT INSPECTION

An important cog in both Federal and State meat inspection programs is the system of laboratories for analyzing samples from packing and processing plants.

By this December—or by December 1970 if sufficient progress is shown—States will be required to have inspection programs which measure up to the standards set in the Wholesome Meat Act of 1967. State laboratories must then be prepared for the increased workload which will result under the new program.

Officials of the U.S. Department of Agriculture's Consumer and Marketing Service are in the final stages of touring the laboratories in each of the States to check their preparedness for full implementation of the Wholesome Meat Act.

C&MS officials have been generally impressed by the State facilities. With over half the States already reviewed, most have been found to have the laboratory capability for the important chemical, biological, and pathological analyses which are a key behind-the-scenes aspect of any effective meat inspection program. But in most cases, the substantial new duties for the States will require increases in laboratory personnel.

Meat inspectors in the field, as a standard operating procedure, send samples of meat products for laboratory analysis of purity, composition standards, and label ingredients. For federally inspected plants, USDA maintains laboratories throughout the country which test

thousands of meat samples each month.

Under the Wholesome Meat Act, USDA will continue to have inspection duties for plants which sell across State lines. The States, however, will be required to apply equally stringent standards to plants which sell only within the State. State laboratories will thus have an important role in each State's efforts. As C&MS checks each laboratory, the State is furnished with advice and guidance on improving its facilities. In the event of serious difficulties, C&MS is prepared to offer temporary back-up services for the State laboratory. □

INSPECTION FOR YOUR PROTECTION

Inspection of more than 100 billion pounds of meat and poultry was a massive task that the U.S. Department of Agriculture accomplished for your protection in 1968.

The job continues in 1969, as a first line of defense against the possibility of unfit or improperly labeled products reaching your food store. Inspectors with USDA's Consumer and Marketing Service recently took these routine actions, which exemplify the continuing inspection activity:

... They refused entry into the country of 33,600 pounds of imported boneless beef, found at the U.S. port of entry to be contaminated.

... They condemned a half-million pounds of ready-to-cook turkey product, which had become unwholesome as a result of a fire in the processing plant where it was prepared.

... They condemned 4,600 pounds

of sausage after finding that it contained metal shavings from the grinder.

... They stopped cooked-ham operations in a meat processing plant until the ham molds, found to be unclean, were properly sanitized.

... They retained 1,550 cans of improperly labeled chicken soup, and required that labeling be corrected before shipment.

... They condemned 305 pounds of buttered beef steaks that had become contaminated as a result of lubricating grease that leaked into a butter whipping machine.

... They condemned 240 pounds of frying chicken wings, found at a processing firm to be decomposed.

... They required that a lot of pork sausage, found to contain excess fat, be reprocessed to meet requirements.

... They rejected 128 pounds of imported canned franks due to damaged cans and improper labels. □

A NATIONAL MARKET NEWS SERVICE FOR ORNAMENTAL CROPS

The Market News Service on cut flowers, which began experimental reporting of sales of cut flowers in the central coastal counties of California and the San Francisco terminal market in December 1967, has now developed into a national Market News Service for Ornamental Crops.

During the experimental period, reports covered the five main crops of the floriculture industry—roses, carnations, standard chrysanthemums, gladioli, and pompons.

Now the reports cover additional flowers, foliage and other ornamental plants. The market news reports

are provided on a regular basis three times a week by the Federal-State Market News Service in Florida and southern California producing areas and the Chicago and Dallas-Fort Worth terminal markets, as well as the two areas first covered.

Ornamental crops—which include such other products as potted chrysanthemum and azalea plants, anthuriums, orchids, iris, tulips, Christmas trees, and many varieties of greens—are high-value crops. Growers, shippers, wholesale receivers, and retailers use the market news reports on prices, supplies, and market conditions to help them decide where and when to buy and sell.

The Federal-State Market News Service is administered by the U.S. Department of Agriculture's Consumer and Marketing Service in cooperation with State agencies. The C&MS Fruit and Vegetable Division operates the Ornamental Crops Market News Service in cooperation with the California, Florida, and Texas State Departments of Agriculture. □

NEW INFORMATIONAL MATERIALS FROM C&MS

Here is the quarterly roundup of new informational materials issued by the U.S. Department of Agriculture's Consumer and Marketing Service:

Sources of Milk for Federal Milk Order Markets by State and County, C&MS-50; *1969 Acreage Marketing Guide—Spring Vegetables and Melons*, AMG-64; *A Menu Planning Guide for Breakfast at School*, C&MS-70; *Match Supply With Demand To Market Vegetables Successfully*, C&MS-73; and *1969 Turkey Marketing Guide*, PMG-5.

Single copies of these publications are available free from the Information Division, Consumer and Marketing Service, U.S. Department of Agriculture, Washington, D. C. 20250.

Three new slide series are also

available from C&MS. "U.S. Standards for Quality of Eggs" is a technical slide series for egg graders, agricultural extension personnel, and high school and vocational instructors in agriculture.

"Food Value Stretchers" is a series designed for leaders to demonstrate recipes using evaporated milk and other USDA-donated foods.

Both are available for \$5.50 each from Photography Division, Office of Information, U.S. Department of Agriculture, Washington, D. C. 20250. They are also available as filmstrips for the same price from Photo Lab, Inc., 3825 Georgia Ave. N.W., Washington, D.C. 20011.

A third slide series, "Inspection for Your Protection," is an 80-slide presentation designed to tell the story of meat and poultry inspection to consumers. The price is \$10 and it is available from Photography Division, Office of Information, U.S. Department of Agriculture, Washington, D.C. 20250. □

PLENTIFUL FOODS FOR APRIL

Turkeys, perhaps America's most festive birds, are featured on the April plentiful foods list of the U.S. Department of Agriculture's Consumer and Marketing Service. Current cold storage holdings are large, and prices reasonable, so housewives will do well to keep this longtime favorite on their shopping lists.

Other items on the April list are nutritious prunes, canned and frozen green beans, canned and frozen sweet corn, onions, rice, dry beans, peanuts and peanut products.

Foods in plentiful supply are reported every month by C&MS for shoppers' guidance.

April, besides being one of the year's most welcome months, also brings numerous special occasions—Good Friday, Easter Sunday, the Passover season, and National Turkey Month. □

FOOD TIPS

—from USDA's Consumer
and Marketing Service

It's been said that breakfast is the most important meal of the day since your body has probably gone without food for at least 10-12 hours. One excellent way to assure yourself of getting a hearty breakfast is to add cereals. Cereals are made from grain products and are good sources of food energy at relatively low cost. The U.S. Department of Agriculture's Consumer and Marketing Service advises you to store cereals in a cool, dry place. To restore crispness, heat the cereal in a shallow baking pan in a preheated oven at 350 degrees for about 5 minutes.

* * *

If you are confused by the large variety of steaks available in the store, this refresher course might be helpful. Cuts from the rib and loin sections of the animal will always be more tender than those from the active muscles such as the shoulder (chuck), flank, and round. The most tender cuts of steak, according to the Consumer and Marketing Service of the U.S. Department of Agriculture, are tenderloin (filet mignon), porterhouse, T-bone, strip loin, club, sirloin and rib steaks. Sirloin tip, top round, and blade chuck steaks are moderately tender. Bottom round, arm chuck, and flank steaks are the least tender cuts. For any given cut, the higher the USDA grade, the more tender, juicy, and flavorful the steak will be. □

Housewives' Tastes Test Orange Juice

A panel of housewives in Winter Haven, Florida, is helping the Florida citrus industry judge what the consumer wants in a glass of orange juice.

By Weston T. Gardner

A GROUP OF WINTER Haven, Fla. housewives are meeting for an hour every other Wednesday to have orange juice together.

Rather than a social gathering to catch up on the latest neighborhood gossip, it's part of a program to assure you that the orange juice you buy will taste the way you like it.

Thirty Winter Haven housewives participate in the program, held under the supervision of chemists and inspectors of the U.S. Department of Agriculture's Consumer and Marketing Service whose job is to grade and certify the quality of Florida orange juice.

Florida State law requires that all processed citrus products be graded for quality according to standards set by the Florida Citrus Commission. These standards, for the most part, are identical to U.S. grade standards. Orange juice of the same quality grade—Grade A, for example—can vary in flavor because of minor differences in quality characteristics such as the sugar to acid ratio, amount of pulp, oil or aroma.

The Winter Haven panel was created when the Florida Canners' Association developed and recommended to the Florida Citrus Commission a quality improvement program for Florida concentrated orange juice. The taste test panel serves as a check on the quality improvement program.

Originally, the taste test panel consisted of citrus industry personnel, ranging from secretaries to presidents of orange juice processing

companies. Later, the housewives' panel was set up and the two panels now meet on alternate weeks.

Mrs. Ann Pinner, USDA chemist at the Fruit and Vegetable Division Winter Haven laboratory, who helped establish the program, said the housewives' panel was added to the program to insure that a meaningful taste test would be conducted.

"The industry people are naturally going to have a different point of view because they are familiar with seasonal and varietal characteristics," she said. "The consumer doesn't know that. She only knows that she likes the taste or she doesn't and why."

The author is a Marketing Specialist, Processed Products Standardization and Inspection Branch, Fruit and Vegetable Division, C&MS, USDA.

Before any of the women can be accepted on the panel, they must pass a rigid test to determine their ability to pick out flavors.

The panel tests are conducted with concentrate and chilled juice samples that USDA inspectors collect from the orange juice processing plants throughout the State. Representatives of the Florida Canners' Association put codes on the bottles of samples so that no one except themselves will know the brand names of the samples.

When the Winter Haven laboratory receives the labeled samples, it arranges them in random order. Each of the samples is tasted by ten

different women.

Since color and other visual characteristics may affect a person's like or dislike of orange juice, the samples are served in red colored glasses in booths with red lighting.

After tasting the orange juice, the panelists are asked to grade it on a scale of one to nine, the latter being the highest possible score. If a woman gives any rating under five, she must explain it. Such a rating may be attributed to any taste characteristic which she finds undesirable.

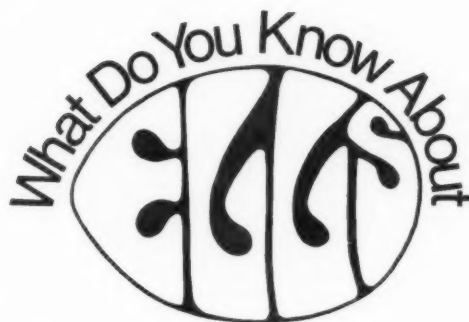
Once the women have rated the samples, staff members of the Fruit and Vegetable Division's inspection laboratory chart the results in averages which compare the samples with each other. The results are turned over to the Florida Canners' Association, which gives them to the individual companies. Charts given to a company show its average in relation to other companies, but the other companies are not identified. Thus, a company can check its results against the overall ratings given to orange juice produced throughout the State during that period.

Mrs. Pinner said the program had produced excellent results since its inception.

"I think this program is a great help to the processed orange juice industry because it can see through the taste testing results that it is important to produce and maintain a high-quality product if the industry wants the housewife to buy it for her family."

A USDA chemist prepares the orange juice (left) that a housewife on the panel tastes (right).





UNCERTAIN ABOUT YOUR knowledge of eggs and egg quality? Try this true-false quiz from the U.S. Department of Agriculture and see how much you really know about buying and storing eggs.

Questions (Answer true or false)

1. A U.S. Grade A Large egg is better than a U.S. Grade A Medium egg.
2. You should never use a dirty or cracked egg in an eggnog.
3. A U.S. Grade B egg will be just as nutritious as a U.S. Grade A egg.
4. For best quality, store eggs promptly and large end up in your refrigerator.
5. All eggs in a carton marked "Large" are identical in size.
6. Not all cartons marked "Grade A" have been officially graded by the Federal-State Grading Service.
7. Eggs are no good after a week in the refrigerator.
8. If you want to serve poached eggs, U.S. Grade AA or A eggs would be your best choice.
9. Shell color does not affect the nutritive value or quality of eggs.
10. Leftover egg yolks should be covered with cold water before storing in the refrigerator.

Answers

1. False. A large egg is bigger than a medium egg, not better. Remember, size refers to weight of the egg; the grade refers to the quality of the egg.
2. True. Eggs eaten uncooked—as in an eggnog—should always be clean and shouldn't be cracked. This is just to insure an extra safeguard for

your family against possible contamination by bacteria. Never buy cracked or dirty eggs. If you buy USDA-graded eggs, they will be clean and sound-shelled and will be safe to use for all purposes. If one becomes cracked accidentally, use it only in thoroughly cooked dishes. Don't use dirty eggs for any purpose.

3. True. The Grade B egg may not look quite as nice as the Grade A egg if you fry or poach it, but it will be just as nutritious.

4. True. Keeping eggs large end up will keep the yolk from sticking to the shell and help them keep their natural quality longer. Keeping them in the refrigerator is essential to keep the egg's natural quality. Get the eggs under refrigeration as soon as possible. Holding them for any length of time in a warm place can result in quality loss.

5. False. If a carton of USDA-graded eggs is labeled "Large," all the eggs together must weigh at least 24 ounces. There may be some slight variation between individual eggs, but rarely should any be smaller than the average for "Large," 2 oz. per egg. If you find apparent disparity in egg sizes, chances are you'll have some eggs larger than the average marked, not smaller. Here are the sizes usually sold, and the minimum weight per dozen for each size:

Extra Large	27 ounces
Large	24 ounces
Medium	21 ounces
Small	18 ounces

6. True. Only egg cartons marked with the official USDA grade shield

have been officially graded under the Federal-State grading service. Eggs marked simply "Grade A" are supposed to meet State or local standards for quality which usually are based on Federal standards. Remember, you can be sure of egg quality if you look for the USDA grade shield.

7. False. Eggs will lose some quality (appearance) after a week in the refrigerator, but they will usually still be just as good in taste and in nutritive value. To prevent off-taste, don't store eggs next to cheese, citrus, fish, or other aromatic foods.

8. True. U.S. Grade AA and A eggs have high standing yolks, thick whites and won't spread out in the pan. These highest quality eggs are best for poaching or frying.

9. True. Shell color is determined by the breed of hen. It does not affect the nutritive value or quality of an egg.

10. True. Leftover egg yolks should be covered with cold water and stored in the refrigerator in a tightly closed container. Use within a day or two. Extra egg whites should also be refrigerated promptly in a tightly closed container and used within a day or two. Don't cover the egg whites with water.

To keep your egg knowledge score high, write for a free copy of "How To Buy Eggs" (G-144), published by USDA's Consumer and Marketing Service.

Send a postcard request to Office of Information, U.S. Department of Agriculture, Washington, D.C. 20250. Please use your ZIP code. ☐

OFFICIAL BUSINESS



NEW TOOLS FOR THE GRAIN INDUSTRY

The revised U.S. Grain Standards Act will help improve merchandising of grain.

By Howard Woodworth

THE GRAIN INDUSTRY has a new set of inspection and merchandising tools to help move grain from one market to another quickly and efficiently.

The new tools are provided by the revised U.S. Grain Standards Act, signed into law last August and now being implemented. Administration of the act is the responsibility of the U.S. Department of Agriculture's Consumer and Marketing Service. Certain parts of the act, including the provision that grain shipped by grade in interstate commerce may be inspected on a permissive rather than a mandatory basis, became effective on September 14. Other major provisions of the act did not become fully effective until March 10.

What are some of the new tools that the grain industry can use under the revised act?

- Buyers and sellers of grain can obtain additional inspection services, including the inspection of export grain for protein content.

- A unit train and similar multi-car shipments may be inspected and certified as a lot instead of on an individual carlot basis.

- Buyers and sellers have greater flexibility as to when and where they can request reinspections and appeal inspections.

- Grain elevator employees may be authorized to draw official samples, thus making official inspections available at more shipping points.

- Certificates of inspection will be more descriptive and will include such additional information as the date and method of sampling. The certificates will be color coded to indicate the types of inspections, such as submitted sample, warehouseman's sample, and export inspections.

- Certificates of grade will show additional quality factor information, including each factor that determines the grade of the grain and each of the factors for which an analysis has been made.

- Greater protection from fraudulent practices will be afforded. These practices include manipulating and changing samples and falsifying applications for inspections.

In addition to the new tools that will benefit the merchandising of grain, other tools will help inspection agencies designated by C&MS' Grain Division:

- The agencies will have broader operating areas. In the past an agency was authorized to perform official inspection service at a specified location such as a town or port. In the future an inspection agency will be assigned a designated area.

- New statistical tolerances, which will effectively reduce the number of reinspections, are being developed.

- A licensed inspector can refuse to perform a requested inspection service if the working conditions are unsafe.

- Licensed inspectors can perform reinspections based on file samples retained by the inspection agencies.

- Licensed inspectors will be able to average the quality of grain in a carlot if there are two or more qualities in the same lot and if no portion is out of condition. For example, if the bottom of a carlot is No. 3 corn and the top is No. 1 corn, the certificate will show the average grade for the corn. In the past two different grades were shown.

- Inspection personnel will have to meet more stringent qualifications before being licensed by C&MS.

These are some of the new tools the revised U.S. Grain Standards Act offers to the grain industry and inspection agencies designated by C&MS' Grain Division. These tools will help modernize the inspection service and improve merchandising of grain.

The author is Chief, Grain Inspection Branch, Grain Division, C&MS, USDA.

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